

Component IV: Greatest Inventory Needs

“Over time, this Strategy will allow FWP to collect data for 1) species for which we do not have sufficient information to determine their level of conservation need, 2) species that are important or indicator species for the health of certain communities, or 3) species we think can help us measure the success we are having at conserving our fish and wildlife using a comprehensive approach.”

Prior to assessing inventory needs, we obtained and entered 130,000 additional observation points to the Point Observation Database (POD) maintained by the Montana Natural Heritage Program (MNHP). However, many species still have inadequate amounts of data, poor quality data, or outdated information. Without adequate occurrence data it is difficult to determine the abundance or distribution of a species, making it impossible to confidently classify the need for conservation of a species and the habitats that sustain it. Likewise, many species and groups of species that might have adequate observations offer unique opportunities to gauge the health of other fish and wildlife as well as habitats through ongoing monitoring. We define inventory as collecting data in order to establish the occurrence and distribution of species, but we also recognize that collecting data in order to establish population trends of species statewide over time is important and could occur coincidentally with inventory efforts. Future versions of this Strategy should consider developing separate species monitoring and species research components that assign species and species groups to tiers based on the specific need for trend monitoring or research.

The following species and groups of species were identified as Tier I (in greatest need of inventory). This tier assignment is separate from the species component tier assignments provided earlier in this Strategy. In other words, the species assigned Tier I for this inventory component were assessed whether or not the species has a population considered low or declining. Ongoing inventory for the following groups should continue, and coordinated efforts should be made to inventory these groups and species. The following legend can be used to provide information about why a group or species has been classified as Tier I, and can also be used to frame experimental designs. All species and group inventory tier assignments can be found in Tables 7 and 8.

Legend for Groups and Species in Greatest Inventory Needs:

Inventory:

- I¹ : Observational data is lacking
- I² : Observational data is outdated
- I³ : Observational data is of poor quality
- I⁴ : Statewide inventory needed
- I⁵ : Localized inventory needed
- I⁶ : Group/species require targeted survey efforts
- I⁷ : Information required to know if species is a migratory or peripheral species
- I^M : Monitoring efforts required

Other:

- O¹ : Dependant on critical habitats
- O² : Opportunity exists for law enforcement to assist with inventory
- Tier I Sp.: The species is a species of greatest conservation need (Tier I)

Groups with Greatest Inventory Needs

Groups with Greatest Inventory Needs	I ¹	I ²	I ³	I ⁴	I ⁵	I ⁶	I ⁷	I ^M	O ¹	O ²
Invertebrate Group	X			X		X				
Crayfish Group	X			X		X				
Mussels Group	X			X		X				
Fish, Prairie Group	X			X		X				
Reptiles Group	X			X		X				
Birds, Shorebirds/Waterbirds Group	X			X		X			X	X
Birds, Nocturnal Group	X			X		X			X	
Mammals, Bats Group	X			X		X				
Mammals, Small Group	X			X		X				

Species with Greatest Inventory Needs

Species with Greatest Inventory Needs	I¹	I²	I³	I⁴	I⁵	I⁶	I⁷	I^M	O¹	O²	Tier 1 Sp.
Calico Crayfish	X			X		X		X		X	
Virile Crayfish	X			X		X		X		X	
A Crayfish	X			X		X		X		X	
Signal Crayfish	X			X		X		X		X	
Black Sandshell	X			X							
Western Pearlshell	X			X							X
Torrent Sculpin	X			X							
Spoonhead Sculpin	X			X							
Shortnose Gar	X				X						X
Lake Trout (native lakes)	X					X		X		X	X
Western Silvery Minnow	X			X		X		X			
Brassy Minnow	X			X		X		X			
Plains Minnow	X			X		X		X			
Pearl Dace	X			X							X
Trout-perch	X			X							X
Iowa Darter	X			X							
Coeur d' Alene Salamander	X						X	X			X
Plains Spadefoot	X			X				X			
Western Toad								X			X
Great Plains Toad	X						X	X			
Northern Leopard Frog								X			X
Snapping Turtle	X			X		X		X			X
Spiny Softshell	X			X		X		X			X
Northern Alligator Lizard	X			X		X		X			
Western Skink	X			X		X		X			
Rubber Boa	X			X		X		X			
Western Hog-nosed Snake	X			X		X		X			X

Species with Greatest Inventory Needs	I¹	I²	I³	I⁴	I⁵	I⁶	I⁷	I^M	O¹	O²	Tier 1 Sp.
Milksnake	X			X		X		X	X		X
Smooth Greensnake	X				X	X	X				X
American Bittern	X			X					X		
Black-crowned Night-heron	X			X					X		
White-faced Ibis	X			X					X		
Northern Goshawk	X					X		X			
Columbia Sharp-tailed Grouse	X					X		X		X	X
Yellow Rail	X			X			X				X
Greater Yellowlegs	X			X			X				
Solitary Sandpiper	X			X			X				
Semipalmated Sandpiper	X			X			X				
Western Sandpiper	X			X			X				
Least Sandpiper	X			X			X				
Baird's Sandpiper	X			X			X				
Pectoral Sandpiper	X			X			X				
Dunlin	X			X			X				
Long-billed Dowitcher	X			X			X				
Arctic Tern	X			X			X				
Black-billed Cuckoo	X			X					X		
Yellow-billed Cuckoo	X			X			X		X		
Barn Owl	X			X			X		X		
Northern Hawk Owl	X			X		X				X	
Common Nighthawk	X			X		X		X		X	
Common Poorwill	X			X		X		X			
Black Swift	X				X	X		X	X		
Chimney Swift	X			X		X			X		
White-throated Swift	X			X		X		X			
Black-chinned Hummingbird	X			X					X		
Alder Flycatcher	X			X		X		X			
Purple Martin	X			X		X	X				

Species with Greatest Inventory Needs	I¹	I²	I³	I⁴	I⁵	I⁶	I⁷	I^M	O¹	O²	Tier 1 Sp.
Canyon Wren	X			X		X		X	X		
Sedge Wren	X			X			X				X
American Dipper	X	X		X		X		X			
Blue-gray Gnatcatcher	X				X	X	X				
Eastern Bluebird	X			X			X				
Western Bluebird	X			X		X		X			
Black-and-white Warbler	X			X		X		X	X		
Indigo Bunting	X			X		X		X	X		
Green-tailed Towhee	X			X		X		X	X		
Field Sparrow	X				X	X	X	X			
Le Conte's Sparrow	X			X			X				
Nelson's Sharp-tailed Sparrow	X			X			X				X
Black Rosy-finch	X			X			X				
Arctic Shrew	X				X		X				
Northern Myotis	X			X			X				
Eastern Red Bat	X			X			X				
Spotted Bat	X			X		X		X			X
Townsend's Big-eared Bat	X			X		X		X	X		X
Pallid Bat	X			X			X				X
American Pika	X			X		X		X	X		
Eastern Cottontail	X			X			X				
Black-tailed Jackrabbit	X				X	X		X			
Uinta Chipmunk	X				X	X					
Hoary Marmot	X				X	X		X	X		X
Uinta Ground Squirrel	X				X	X		X			
Wyoming Ground Squirrel	X				X	X		X			
Northern Flying Squirrel	X				X	X		X			
Idaho Pocket Gopher	X				X	X		X			
Hispid Pocket Mouse	X				X		X				
Water Vole	X			X		X		X			

Species with Greatest Inventory Needs	I¹	I²	I³	I⁴	I⁵	I⁶	I⁷	I^M	O¹	O²	Tier 1 Sp.
Sagebrush Vole	X			X		X		X			
Northern Bog Lemming	X				X	X		X	X		X
Meadow Jumping Mouse	X			X		X		X			X
Common Porcupine	X	X		X		X		X		X	
Western Spotted Skunk	X			X			X		X	X	